

***LineUp With Math™* Alignment**
Mathematics Content Standards, Benchmarks and Performance Standards
June 2002

Strand: NUMBER AND OPERATIONS**Standard:** Students will understand numerical concepts and mathematical operations.**5-8 Benchmark:** Understand the meaning of operations and how they relate to one another.**Performance Standards: Grade 7**

3. Calculate given percentages of quantities and use them to solve problems (e.g., discounts of sales, interest earned, tips, markups, commission, profit, simple interest).

***LineUp With Math™* Activities**

--Use percent relationships to resolve distance, rate, time conflicts in air traffic control.

5-8 Benchmark: Compute fluently and make reasonable estimates.**Performance Standards: Grade 7**

4. Calculate the percentage of increases and decreases of a quantity.

***LineUp With Math™* Activities**

--Use percent relationships to resolve distance, rate, time conflicts in air traffic control.

Strand: ALGEBRA**Standard:** Students will understand algebraic concepts and applications.**5-8 Benchmark:** Understand patterns, relations, and functions.**Performance Standards: Grade 7**

6. Solve problems involving rate, average speed, distance, and time.

***LineUp With Math™* Activities**

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

--Identify and resolve distance, rate, time conflicts in air traffic control problems by varying plane speeds or changing plane routes.

Strand: MEASUREMENT**Standard:** Students will understand measurement systems and applications.**5-8 Benchmark:** Understand measurable attributes of objects and the units, systems, and processes of measurement.**Performance Standards: Grade 7**

5. Use measures expressed as rates and measures expressed as products to solve problems, check the units of the solutions, and analyze the reasonableness of the answer.

***LineUp With Math™* Activities**

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

5-8 Benchmark: Apply appropriate techniques, tools, and formulas to determine measurements.

Performance Standards: Grade 7

3. Solve problems involving scale factors, ratios, and proportions.

***LineUp With Math™* Activities**

--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.